

ABSTRACT OF THE INVENTION

The present invention relates to a blend of 15-97 weight percent electret fibers and 3-85 percent by weight dissimilar non-electret fibers using dry laid blending techniques. The electret fibers incorporate 0.05 to 30 weight percent charge control agents. Optionally, at least about 3 to about 50 weight percent of said blend is bicomponent fibers having a low melting component to bond the blend into a unitary nonwoven structure. The blend is bonded to form nonwoven webs that are used in making filter fabric and particularly air filter fabric. The charge control agents are selected from the class of triphenylmethanes; ammonium and immonium compounds; fluorinated ammonium and immonium compounds; bis-cationic acid amides; polymeric ammonium compounds; diallylammonium compounds; arylsulfide derivatives; phenol derivatives; phosphonium compounds and fluorinated phosphonium compounds; calix(n)arenes; metal complex compounds; benzimidazolones; and azines, thiazines or oxazines which are listed in the Color Index as Pigments, Solvent Dyes, Basic Dyes or Acid Dyes. The preferred blend contains electret fibers of polypropylene with one or more charge control agents and polyethylene terephthalate fibers having no charge control agents.

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